

		EMR	EMT	AEMT	INTERMEDIATE	PARAMEDIC
1	Preparatory	Uses simple knowledge of the EMS system, safety/well-being of the EMR, medical/legal issues at the scene of an emergency while awaiting a higher level of care.	Applies fundamental knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.	Applies fundamental knowledge of the EMS system, safety/well-being of the AEMT, medical/legal and ethical issues to the provision of emergency care.	Same as previous level	Integrates comprehensive knowledge of EMS systems, the safety/well-being of the paramedic, and medical/legal and ethical issues which is intended to improve the health of EMS personnel, patients, and the community.
1A	EMS Systems	Simple depth, simple breadth • EMS systems • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement	EMR Material PLUS: Simple depth, foundational breadth • EMS systems • History of EMS • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement • Patient safety	EMT Material PLUS: Fundamental depth, foundational breadth • Quality improvement • Patient safety	Same as previous level	Intermediate Material PLUS: Fundamental depth, foundational breadth • History of EMS Complex depth, comprehensive breadth • EMS systems • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement • Patient safety
1B	Research	Simple depth, simple breadth • Impact of research on EMR care • Data collection	EMR Material PLUS: Simple depth, simple breadth • Evidence-based decision making	Same as Previous Level	Same as previous level	Intermediate Material PLUS: Fundamental depth, foundational breadth • Research principles to interpret literature and advocate evidence-based practice
1C	Workforce Safety and Wellness	Simple depth, simple breadth • Standard safety precautions • Personal protective equipment • Stress management • Dealing with death and dying • Prevention of response related injuries • Lifting and moving patients	EMR Material PLUS: Fundamental depth, foundational breadth • Standard safety precautions • Personal protective equipment • Stress management • Dealing with death and dying • Prevention of work related injuries • Lifting and moving patients • Disease transmission • Wellness principles	Same as Previous Level	Same as previous level	Intermediate Material PLUS: Complex depth, comprehensive breadth • Provider safety and wellbeing • Standard safety precautions • Personal protective equipment • Stress management • Dealing with death and dying • Prevention of work related injuries • Lifting and moving patients • Disease transmission • Wellness principles

2

Virginia EMS Education Standards (VEMSES)

2	Anatomy and Physiology	Uses simple knowledge of the anatomy and function of the upper airway, heart, vessels, blood, lungs, skin, muscles, and bones as the foundation of emergency care.	Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.	Integrates complex knowledge of the anatomy and physiology of the airway, respiratory and circulatory systems to the practice of EMS.	Integrates complex knowledge of the anatomy and physiology of the airway, respiratory, circulatory, muscular skeletal, nervous, integumentary, endocrine, and digestive systems as well as a fundamental appreciation of the immune system to the practice of EMS.	Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems
3	Medical Terminology	Uses simple medical and anatomical terms.	Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.	Same as Previous Level	Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals consistent with the systems described in A&P.	Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.
4	Pathophysiology	Uses simple knowledge of shock and respiratory compromise to respond to life threats.	Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.	Applies comprehensive knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.	Applies comprehensive knowledge of the pathophysiology of respiration and perfusion to patient assessment. This includes management as well as a foundational appreciation for the other body systems included for this level.	Integrates comprehensive knowledge of pathophysiology of major human systems.
5	Life Span Development	Uses simple knowledge of age related differences to assess and care for patients.	Applies fundamental knowledge of life span development to patient assessment and management.	Same as Previous Level	Same as Previous Level	Integrates comprehensive knowledge of life span development.
6	Public Health	Have an awareness of local public health resources and the role EMS personnel play in public health emergencies.	Uses simple knowledge of the principles of illness and injury prevention in emergency care.	Uses simple knowledge of the principles of the role of EMS during public health emergencies.	Same as Previous Level	Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.

7	Pharmacology	Uses simple knowledge of the medications that the EMR may self-administer or administer to a peer in an emergency.	Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency.	Applies to patient assessment and management fundamental knowledge of the medications carried by AEMTs that may be administered to a patient during an emergency.	Applies comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.	Integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.
7A	Principles of Pharmacology	No knowledge related to this competency is applicable at this level.	Simple depth, simple breadth <ul style="list-style-type: none"> • Medication safety • Kinds of medications used during an emergency 	EMT Material PLUS: Fundamental depth, foundation breadth <ul style="list-style-type: none"> • Medication safety • Medication legislation • Naming • Classifications • Storage and security • Autonomic pharmacology • Metabolism and excretion • Mechanism of action • Medication response relationships • Medication interactions • Toxicity 	AEMT Material PLUS: Complex depth, comprehensive breadth) <ul style="list-style-type: none"> • Medication safety • Medication legislation • Naming • Classifications • Schedules • Pharmacokinetics • Storage and security • Autonomic pharmacology • Metabolism and excretion • Mechanism of action • Phases of medication activity • Medication response relationships • Medication interactions • Toxicity 	Intermediate Material PLUS: Complex depth, comprehensive breadth) <ul style="list-style-type: none"> • Medication safety • Medication legislation • Naming • Classifications • Schedules • Pharmacokinetics • Storage and security • Autonomic pharmacology • Metabolism and excretion • Mechanism of action • Phases of medication activity • Medication response relationships • Medication interactions • Toxicity
7B	Medication Administration	Simple depth, simple breadth Within the scope of practice of the EMR, how to <ul style="list-style-type: none"> • Self-administer medication • Peer-administer medication 	EMR Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the EMT how to <ul style="list-style-type: none"> • Assist/administer medications to a patient 	EMT Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • Routes of administration • Within the scope of practice of the AEMT, administer medications to a patient 	AEMT Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> • Routes of administration • Within the scope of practice of the intermediate, administer medications to a patient 	Intermediate Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> • Routes of administration • Within the scope of practice of the paramedic, administer medications to a patient
7C	Emergency Medications	Simple depth, simple breadth Within the scope of practice of the EMR <ul style="list-style-type: none"> • Names • Effects • Indications • Routes of administration • Dosages for the medications administered 	EMR Material PLUS: Fundamental depth, simple breadth within the scope of practice of the EMT <ul style="list-style-type: none"> • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered 	EMT Material PLUS: Fundamental depth, foundational breadth within the scope of practice of the AEMT <ul style="list-style-type: none"> • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered 	Same as Previous Level	Intermediate Material PLUS: Complex depth, comprehensive breadth within the scope of practice of the paramedic <ul style="list-style-type: none"> • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered

8	Airway Management, Respiration and Artificial Ventilation	Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting additional EMS response for patients of all ages.	Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.	Applies knowledge (fundamental depth, foundational breadth) of additional upper airway anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.	Applies complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.	Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
8A	Airway Management	Fundamental depth, simple breadth Within the scope of practice of the EMR • Airway anatomy • Airway assessment • Techniques of assuring a patent airway	EMR Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the EMT • Airway anatomy • Airway assessment • Techniques of assuring a patent airway	EMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the AEMT • Airway anatomy • Airway assessment • Techniques of assuring a patent airway	AEMT Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the intermediate • Airway anatomy • Airway assessment • Techniques of assuring a patent airway	Intermediate Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the paramedic • Airway anatomy • Airway assessment • Techniques of assuring a patent airway
8B	Respiration	Fundamental depth, simple breadth • Anatomy of the respiratory system • Physiology and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy	EMR Material PLUS: Fundamental depth, foundational breadth • Anatomy of the respiratory system • Physiology and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy	EMT Material PLUS: Complex depth, foundational breadth • Anatomy of the respiratory system Fundamental depth, comprehensive breadth • Physiology and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy	AEMT Material PLUS: (SAP) Complex depth, comprehensive breadth • Anatomy of the respiratory system • Physiology, and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy	Intermediate Material PLUS: Complex depth, comprehensive breadth • Anatomy of the respiratory system • Physiology, and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy

8C	Artificial Ventilation	Fundamental depth, simple breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	EMR Material PLUS: Fundamental depth, foundational breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	EMT Material PLUS: Complex depth, foundational breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	AEMT Material PLUS: Complex depth, comprehensive breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	Intermediate Material PLUS: Complex depth, comprehensive breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output
	Assessment	Use scene information and simple patient assessment findings to identify and manage immediate life threats and injuries within the scope of practice of the EMR.	Applies scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, and reassessment) to guide emergency management.	Same as Previous Level	Applies scene and patient assessment findings with knowledge of pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.	Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
9A	Scene Size-Up	Complex depth, comprehensive breadth • Scene safety Fundamental depth, foundational breadth • Scene management o Impact of the environment on patient care o Addressing hazards o Violence o Need for additional or specialized resources o Standard precautions	EMR Material PLUS: Fundamental depth, foundational breadth • Scene management o Multiple patient situations	Same as Previous Level	AEMT Material PLUS: Complex depth, comprehensive breadth • Scene management o Impact of the environment on patient care o Addressing hazards o Violence o Multiple patient situations	Intermediate Material PLUS: Complex depth, comprehensive breadth • Scene management o Impact of the environment on patient care o Addressing hazards o Violence o Multiple patient situations

9B	Primary Assessment	Simple depth, simple breadth • Primary assessment for all patient situations o Level of consciousness o ABCs o Identifying life threats o Assessment of vital functions • Begin interventions needed to preserve life	EMR Material PLUS: Fundamental depth, simple breadth • Primary assessment for all patient situations o Initial general impression o Level of consciousness o ABCs o Identifying life threats o Assessment of vital functions • Integration of treatment/procedures needed to preserve life	EMT Material PLUS: Fundamental depth, foundational breadth • Primary assessment for all patient situations o Initial general impression o Level of consciousness o ABCs o Identifying life threats o Assessment of vital functions • Integration of treatment/procedures needed to preserve life	Same as Previous Level	Intermediate Material PLUS: Complex depth, comprehensive breadth • Primary assessment for all patient situations o Initial general impression o Level of consciousness o ABCs o Identifying life threats o Assessment of vital functions • Integration of treatment/procedures needed to preserve life
9C	History Taking	Simple depth, simple breadth • Determining the chief complaint • Mechanism of injury/nature of illness • Associated signs and symptoms	EMR Material PLUS: Fundamental depth, foundational breadth • Investigation of the chief complaint • Mechanism of injury/nature of illness • Past medical history • Associated signs and symptoms • Pertinent negatives	Same as Previous Level	AEMT Material PLUS:(SAP) Complex depth, comprehensive breadth • Components of the patient history • Interviewing techniques • How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation	Intermediate Material PLUS: Complex depth, comprehensive breadth • Components of the patient history • Interviewing techniques • How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
9D	Secondary Assessment	Simple depth, simple breadth • Performing a rapid full body scan • Focused assessment of pain • Assessment of vital signs	EMR Material PLUS: Fundamental depth, foundational breadth Techniques of physical examination • Respiratory system o Presence of breath sounds • Cardiovascular system • Neurological system • Musculoskeletal system • All anatomical regions	EMT Material PLUS: Complex depth, foundational breadth Assessment of • Lung sounds	AEMT Material PLUS: (SAP) Complex depth, comprehensive breadth Techniques of physical examination for all major • Body systems • Anatomical regions	Intermediate Material PLUS: Complex depth, comprehensive breadth Techniques of physical examination for all major • Body systems • Anatomical regions

9E	Monitoring Devices	No knowledge related to this competency is applicable at this level.	Simple depth, simple breadth Within the scope of practice of the EMT • Obtaining and using information from patient monitoring devices including (but not limited to) o Pulse oximetry o Non-invasive blood pressure Blood glucose determination	EMT Material PLUS: Within the scope of practice of the AEMT Simple depth, simple breadth • Obtaining and using information from patient monitoring devices including (but not limited to) o Blood glucose determination	AEMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the Intermediate • Obtaining and using information from patient monitoring devices including (but not limited to): o Continuous ECG monitoring o 12 lead ECG interpretation o Carbon dioxide monitoring o Basic blood chemistry	Intermediate Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the paramedic • Obtaining and using information from patient monitoring devices including (but not limited to): o Continuous ECG monitoring o 12 lead ECG interpretation o Carbon dioxide monitoring o Basic blood chemistry
9F	Reassessment	Simple depth, simple breadth • How and when to reassess patients	EMR Material PLUS: Fundamental depth, foundational breadth • how and when to perform a reassessment for all patient situations	Same as Previous Levels	AEMT Material PLUS: Complex depth, comprehensive breadth • How and when to perform a reassessment for all patient situations	Intermediate Material PLUS: Complex depth, comprehensive breadth • How and when to perform a reassessment for all patient situations
10	Medicine	Recognizes and manages life threats based on assessment findings of a patient with a medical emergency while awaiting additional emergency response.	Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.	Applies fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely ill patient.	Applies assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.	Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
10A	Medical Overview	Simple depth, simple breadth Assessment and management of a • Medical complaint	EMR Material PLUS: Simple depth, foundational breadth Pathophysiology, assessment, and management of a medical complaints to include • Transport mode • Destination decisions	EMT Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of a medical complaints to include • Transport mode • Destination decisions	Same as Previous Level	Intermediate Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of medical complaints to include • Transport mode • Destination decisions

10B	Neurology	Simple depth, simple breadth Anatomy, presentations, and management of • Decreased level of responsiveness • Seizure • Stroke	EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of • Stroke/ transient ischemic attack • Seizure • Status epilepticus • Headache	EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of • Seizure	AEMT Material PLUS: Anatomy, physiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Fundamental depth, comprehensive breadth • Stroke/intracranial hemorrhage/transient ischemic attack • Seizure • Status epilepticus • Headache Fundamental depth, foundational breadth • Dementia • Neurologic inflammation/ infection • Wernicke's encephalopathy	Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth • Stroke/intracranial hemorrhage/transient ischemic attack • Seizure • Status epilepticus • Headache Fundamental depth, foundational breadth • Dementia • Neoplasms • Demyelinating disorders • Parkinson's disease • Cranial nerve disorders • Movement disorders • Neurologic inflammation/ infection • Spinal cord compression • Hydrocephalus • Wernicke's encephalopathy
-----	-----------	---	---	--	--	--

10C	Abdominal and Gastrointestinal Disorders	<p>Simple depth, simple breadth Anatomy, presentations and management of shock associated with abdominal emergencies</p> <ul style="list-style-type: none"> • Gastrointestinal bleeding 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Acute and chronic gastrointestinal hemorrhage <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Peritonitis • Ulcerative diseases 	Same as Previous Level	<p>Same as Previous Level</p> <p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute and chronic gastrointestinal hemorrhage • Liver disorders • Peritonitis • Ulcerative diseases <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Irritable bowel syndrome • Inflammatory disorders • Pancreatitis • Bowel obstruction • Hernias • Infectious disorders • Gall bladder and biliary tract disorders <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Rectal abscess • Rectal foreign body obstruction • Mesenteric ischemia
10D	Immunology	<p>Simple depth, simple breadth Recognition and management of shock and difficulty breathing related to</p> <ul style="list-style-type: none"> • Anaphylactic reactions 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of hypersensitivity disorders and/or emergencies</p> <ul style="list-style-type: none"> • Anaphylactic reactions 	<p>EMT Material PLUS: Complex depth, comprehensive breadth Anatomy, physiology, pathophysiology, assessment, and management of hypersensitivity disorders and/or emergencies</p> <ul style="list-style-type: none"> • Allergic and anaphylactic reactions 	<p>Same as Previous Level</p> <p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major immune system disorders and/or emergencies</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Hypersensitivity • Allergic and anaphylactic reactions • Anaphylactoid reactions <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Collagen vascular disease • Transplant related problems

10E	Infectious Diseases	<p>Simple depth, simple breadth Awareness of</p> <ul style="list-style-type: none"> • A patient who may have an infectious disease • How to decontaminate equipment after treating a patient 	<p>EMR Material PLUS: Simple depth, simple breadth Assessment and management of</p> <ul style="list-style-type: none"> • A patient who may have an infectious disease • How to decontaminate the ambulance and equipment after treating a patient 	<p>AEMT Material PLUS: Fundamental depth, foundational breadth Assessment and management of</p> <ul style="list-style-type: none"> • A patient who may be infected with a bloodborne pathogen <ul style="list-style-type: none"> o HIV o Hepatitis B • Antibiotic resistant infections • Current infectious diseases prevalent in the community 	<p>Same as Previous Level</p>	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • HIV-related disease • Hepatitis • Pneumonia • Meningococcal meningitis <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Tuberculosis • Tetanus • Viral diseases • Sexually transmitted disease • Gastroenteritis • Fungal infections • Rabies • Scabies and lice • Lyme disease • Rocky Mountain Spotted Fever • Antibiotic resistant infections
10F	Endocrine Disorders	<p>Simple depth, simple breadth Awareness that</p> <ul style="list-style-type: none"> • Diabetic emergencies cause altered mental status 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Acute diabetic emergencies 	<p>EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Acute diabetic emergencies 	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, psychosocial impact, presentations, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute diabetic emergencies • Diabetes 	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute diabetic emergencies • Diabetes <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Adrenal disease • Pituitary and thyroid disorders

10G Psychiatric

	Simple depth, simple breadth Recognition of • Behaviors that pose a risk to the EMR, patient or others	EMR Material PLUS: Simple depth, simple breadth • Basic principles of the mental health system Fundamental depth, foundational breadth Assessment and management of • Acute psychosis • Suicidal/risk • Agitated delirium	Same as Previous Level	Fundamental depth, breadth • Basic principles of the mental health system Assessment and management of • Acute psychosis • Suicidal/risk • Agitated delirium Commonly prescribed psychiatric medications	Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth • Acute psychosis • Agitated delirium Fundamental depth, foundational breadth • Cognitive disorders • Thought disorders • Mood disorders • Neurotic disorders • Substance-related disorders / addictive behavior • Somatoform disorders • Factitious disorders • Personality disorders • Patterns of violence/abuse/neglect • Organic psychoses
--	--	--	------------------------	--	--

10H	Cardiovascular	<p>Simple depth, simple breadth Anatomy, signs, symptoms and management</p> <ul style="list-style-type: none"> • Chest pain • Cardiac arrest 	<p>EMR Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Acute coronary syndrome <ul style="list-style-type: none"> o Angina pectoris o Myocardial infarction • Aortic aneurysm/dissection • Thromboembolism <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Heart failure • Hypertensive emergencies 	<p>EMT Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of</p> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Acute coronary syndrome <ul style="list-style-type: none"> o Angina pectoris o Myocardial infarction <p>Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> • Heart failure • Hypertensive emergencies 	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute coronary syndrome <ul style="list-style-type: none"> o Angina pectoris o Myocardial infarction • Heart failure • Hypertensive emergencies • Cardiogenic shock • Vascular disorders <ul style="list-style-type: none"> o Abdominal aortic aneurysm o Venous thrombosis • Aortic aneurysm/dissection, • Thromboembolism • Cardiac rhythm disturbances 	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute coronary syndrome <ul style="list-style-type: none"> o Angina pectoris o Myocardial infarction • Heart failure • Non-traumatic cardiac tamponade • Hypertensive emergencies • Cardiogenic shock • Vascular disorders <ul style="list-style-type: none"> o Abdominal aortic aneurysm o Arterial occlusion o Venous thrombosis • Aortic aneurysm/dissection, • Thromboembolism • Cardiac rhythm disturbances <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Infectious diseases of the heart <ul style="list-style-type: none"> o Endocarditis o Pericarditis • Congenital abnormalities
-----	----------------	--	---	---	---	---

10I	Toxicology	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Recognition and management of <ul style="list-style-type: none"> o Carbon monoxide poisoning o Nerve agent poisoning • How and when to contact a poison control center 	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Inhaled poisons • Ingested poisons • Injected poisons • Absorbed poisons • Alcohol intoxication and withdrawal 	<p>EMT Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Opiate toxidrome 	<p>AEMT Material PLUS: Fundamental depth, comprehensive breadth</p> <p>Anatomy, physiology, pathophysiology, presentations, and management of the following toxidromes and poisonings:</p> <ul style="list-style-type: none"> • Cholinergics • Anticholinergics • Sympathomimetics • Sedative/hypnotics • Opiates • Alcohol intoxication and withdrawal • Over-the-counter and prescription medications • Carbon monoxide • Illegal drugs 	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth</p> <p>Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings:</p> <ul style="list-style-type: none"> • Cholinergics • Anticholinergics • Sympathomimetics • Sedative/hypnotics • Opiates • Alcohol intoxication and withdrawal • Over-the-counter and prescription medications • Carbon monoxide • Illegal drugs • Herbal preparations
10J	Respiratory	<p>Simple depth, simple breadth</p> <p>Anatomy, signs, symptoms and management of respiratory emergencies including those that affect the</p> <ul style="list-style-type: none"> • Upper airway • Lower airway 	<p>EMR Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Epiglottitis • Spontaneous pneumothorax • Pulmonary edema • Asthma • Chronic obstructive pulmonary disease • Environmental/industrial exposure • Toxic gas <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Pertussis • Cystic fibrosis • Pulmonary embolism • Pneumonia • Viral respiratory infections 	<p>EMT Material PLUS: Complex depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Asthma • Obstructive/restrictive disease • Pneumonia 	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, presentations, management of</p> <p>Fundamental depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Spontaneous pneumothorax • Obstructive/restrictive lung diseases • Pulmonary infections 	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute upper airway infections • Spontaneous pneumothorax • Obstructive/restrictive lung diseases • Pulmonary infections <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Neoplasm • Pertussis • Cystic fibrosis

10K	Hematology	No knowledge related to this competency is applicable at this level.	Simple depth, simple breadth Anatomy, physiology, pathophysiology, assessment, and management of • Sickle cell crisis • Clotting disorders	EMT Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of • Sickle cell crisis	AEMT Material PLUS: Anatomy, physiology, pathophysiology, presentations, and management of common or major hematological diseases and/or emergencies Simple depth, foundational breadth • Sickle cell disease Fundamental depth, foundational breadth • Blood transfusion complications	Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major hematological diseases and/or emergencies Complex depth, foundational breadth • Sickle cell disease Fundamental depth, foundational breadth • Blood transfusion complications • Hemostatic disorders • Lymphomas • Red blood cell disorders • White blood cell disorders • Coagulopathies
10L	Genitourinary/Renal	Simple depth, simple breadth • Blood pressure assessment in hemodialysis patients	EMR Material PLUS: Simple depth, simple breadth Anatomy, physiology, pathophysiology, assessment, and management of • Complications related to o Renal dialysis o Urinary catheter management (not insertion) • Kidney stones	EMT Material PLUS: Fundamental depth, simple breadth Anatomy, physiology, pathophysiology, assessment, and management of • Complications related to renal dialysis • Kidney stones	Same as Previous Level	Intermediate Material Plus: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth • Complications of o Acute renal failure o Chronic renal failure o Dialysis • Renal calculi Fundamental depth, foundational breadth • Acid base disturbances • Fluid and electrolyte • Infection • Male genital tract conditions

10M	Gynecology	Simple depth, simple breadth Recognition and management of shock associated with • Vaginal bleeding	EMR Material Plus: Anatomy, physiology, assessment findings, and management of Fundamental depth, foundational breadth • Vaginal bleeding • Sexual assault (to include appropriate emotional support) Simple depth, simple breadth • Infections	Same as Previous Level	AEMT Material Plus: Anatomy, physiology, pathophysiology, presentations, and management of common or major gynecological diseases and/or emergencies Fundamental depth, Foundational breadth • Vaginal/Uterine bleeding • Sexual assault Fundamental depth, foundational breadth • Infections • Pelvic Inflammatory Disease • Ovarian cysts • Vaginal foreign body	Intermediate Material Plus: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major gynecological diseases and/or emergencies Complex depth, comprehensive breadth • Vaginal bleeding • Sexual assault Fundamental depth, foundational breadth • Infections • Pelvic Inflammatory Disease • Ovarian cysts • Dysfunctional uterine bleeding • Vaginal foreign body
10N	Non-Traumatic Musculoskeletal Disorders	No knowledge related to this competency is applicable at this level.	Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of • Non-traumatic fractures	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Fundamental depth, foundation breadth Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major non-traumatic musculoskeletal disorders • Disorders of the spine • Joint abnormalities • Muscle abnormalities • Overuse syndromes
10O	Diseases of the Eyes, Ears, Nose, and Throat	Simple depth, simple breadth Recognition and management of • Nose bleed	Same as Previous Level	Same as Previous Level	AEMT Material Plus: Simple depth, foundational breadth Knowledge of anatomy, physiology, pathophysiology, presentations, management of • Common or major diseases of the eyes, ears, nose, and throat, including nose bleed	Intermediate Material Plus: Fundamental depth, foundational breadth Knowledge of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of • Common or major diseases of the eyes, ears, nose, and throat, including nose bleed

11	Shock and Resuscitation	Uses assessment information to recognize shock, respiratory failure or arrest, and cardiac arrest based on assessment findings and manages the emergency while awaiting additional emergency response.	Applies fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.	Applies fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.	Applies fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.	Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
12	Trauma	Uses simple knowledge to recognize and manage life threats based on assessment findings for an acutely injured patient while awaiting additional emergency medical response.	Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.	Applies fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely injured patient.	Applies assessment findings with principles of pathophysiology to formulate a field impression to implement a Foundational treatment/disposition plan for an acutely injured patient.	Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.
12A	Trauma Overview	No knowledge related to this competency is applicable at this level.	Fundamental depth, foundational breadth Pathophysiology, assessment, and management of the trauma patient • Trauma scoring • Rapid transport and destination issues • Transport mode	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment and management of the trauma patient • Trauma scoring • Transport and destination issues
12B	Bleeding	Simple depth, simple breadth Recognition and management of • Bleeding	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Bleeding	EMT Material Plus: Complex depth, comprehensive breadth • Fluid resuscitation	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Bleeding

12C	Chest Trauma	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> • Blunt versus penetrating mechanisms • Open chest wound • Impaled object 	EMR Material Plus: Fundamental depth, simple breadth Pathophysiology, assessment and management <ul style="list-style-type: none"> • Blunt versus penetrating mechanisms • Hemothorax • Pneumothorax <ul style="list-style-type: none"> o Open o Simple o Tension • Cardiac tamponade • Rib fractures • Flail chest • Commotio cordis 	EMT Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment and management of <ul style="list-style-type: none"> • Traumatic aortic disruption • Pulmonary contusion • Blunt cardiac injury • Hemothorax • Pneumothorax <ul style="list-style-type: none"> o Open o Simple o Tension • Cardiac tamponade • Rib fractures • Flail chest • Commotio cordis • Traumatic asphyxia 	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of <ul style="list-style-type: none"> • Traumatic aortic disruption • Pulmonary contusion • Blunt cardiac injury • Hemothorax • Pneumothorax <ul style="list-style-type: none"> o Open o Simple o Tension • Cardiac tamponade • Rib fractures • Flail chest • Commotio cordis • Tracheobronchial disruption • Diaphragmatic rupture • Traumatic asphyxia
12D	Abdominal and Genitourinary Trauma	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> • Blunt versus penetrating mechanisms • Evisceration • Impaled object 	EMR Material Plus: Fundamental depth, simple breadth Pathophysiology, assessment and management of <ul style="list-style-type: none"> • Solid and hollow organ injuries • Blunt versus penetrating mechanisms • Evisceration • Injuries to the external genitalia • Vaginal bleeding due to trauma • Sexual assault 	EMT Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of <ul style="list-style-type: none"> • Vascular injury • Solid and hollow organs injuries • Blunt versus penetrating mechanisms • Evisceration • Retroperitoneal injuries • Injuries to the external genitalia • Vaginal bleeding due to trauma • Sexual assault 	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of <ul style="list-style-type: none"> • Vascular injury • Solid and hollow organ injuries • Blunt versus penetrating mechanisms • Evisceration • Retroperitoneal injuries • Injuries to the external genitalia

12E	Orthopedic Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Open fractures • Closed fractures • Dislocations • Amputations 	<p>EMR Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Upper and lower extremity orthopedic trauma • Open fractures • Closed fractures • Dislocations • Sprains/strains • Pelvic fractures • Amputations/replantation 	<p>EMT Material Plus: Pathophysiology, assessment, and management of Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Compartment syndrome <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Pelvic fractures • Amputations/replantation 	<p>AEMT Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Pediatric fractures • Tendon laceration/ transection/ rupture (Achilles and patellar) • Compartment syndrome <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Upper and lower extremity orthopedic trauma • Open fractures • Closed fractures • Dislocations 	<p>Intermediate Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Pediatric fractures • Tendon laceration/ transection/ rupture (Achilles and patellar) • Compartment syndrome <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Upper and lower extremity orthopedic trauma • Open fractures • Closed fractures • Dislocations
12F	Soft Tissue Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Wounds • Burns <ul style="list-style-type: none"> o Electrical o Chemical o Thermal • Chemicals in the eye and on the skin 	<p>EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management</p> <ul style="list-style-type: none"> • Wounds <ul style="list-style-type: none"> o Avulsions o Bite wounds o Lacerations o Puncture wounds o Incisions • Burns <ul style="list-style-type: none"> o Electrical o Chemical o Thermal o Radiation <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Crush syndrome 	<p>EMT Material Plus: Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> □ Crush syndrome 	<p>AEMT Material Plus: Fundamental depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Wounds <ul style="list-style-type: none"> o Avulsions o Bite wounds o Lacerations o Puncture wounds • Burns <ul style="list-style-type: none"> o Electrical o Chemical o Thermal • High-pressure injection • Crush syndrome 	<p>Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Wounds <ul style="list-style-type: none"> o Avulsions o Bite wounds o Lacerations o Puncture wounds • Burns <ul style="list-style-type: none"> o Electrical o Chemical o Thermal • High-pressure injection • Crush syndrome

12G	Head, Facial, Neck, and Spine trauma	Simple depth, simple breadth Recognition and management of • Life threats • Spine trauma	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma Simple depth, simple breadth • Facial fractures • Skull fractures • Foreign bodies in the eyes • Dental trauma	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment, and management of • Facial fractures • Laryngeotracheal injuries	AEMT Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth • Unstable facial fractures • Orbital fractures Fundamental depth, Foundational breadth • Skull fractures • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma o Dislocations/subluxations o Fractures o Sprains/strains • Mandibular fractures	Intermediate Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth • Unstable facial fractures • Orbital fractures • Perforated tympanic membrane Complex depth, comprehensive breadth • Skull fractures • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma o Dislocations/subluxations o Fractures o Sprains/strains • Mandibular fractures
	Nervous System Trauma	No knowledge related to this competency is applicable at this level.	Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Traumatic brain injury • Spinal cord injury	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment, and management of • Traumatic brain injury	Same as Previous Level	Intermediate Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth • Cauda equina syndrome • Nerve root injury • Peripheral nerve injury Complex depth, comprehensive breadth • Traumatic brain injury • Spinal cord injury • Spinal shock
	Special Considerations in Trauma	Simple depth, simple breadth Recognition and management of trauma in • Pregnant patient • Pediatric patient • Geriatric patient	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of trauma in the • Pregnant patient • Pediatric patient • Geriatric patient • Cognitively impaired patient	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment, and management of trauma in the • Pregnant patient • Pediatric patient • Geriatric patient • Cognitively impaired patient	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of trauma in the • Pregnant patient • Pediatric patient • Geriatric patient • Cognitively impaired patient

12J	Environmental Emergencies	Simple depth, simple breadth Recognition and management of • Submersion incidents • Temperature-related illness	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Near drowning • Temperature-related illness • Bites and envenomations • Dysbarism o High-altitude o Diving injuries • Electrical injury • Radiation exposure	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Near-drowning • Temperature-related illness • Bites and envenomations • Dysbarism o High-altitude o Diving injuries • Electrical injury • High altitude illness
	Multi-System Trauma	Simple depth, simple breadth Recognition and management of • Multi-system trauma	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Multi-system trauma • Blast injuries	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment and management of • Multi-system trauma	AEMT Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Multi-system trauma • Blast injuries	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Multi-system trauma • Blast injuries
13						
	Special Patient Populations	Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response.	Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs.	Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs.	Applies assessment findings with principles of pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.	Integrates assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.

13A	Obstetrics	Simple depth, simple breadth Recognition and management of • Normal delivery • Vaginal bleeding in the pregnant patient	EMR Material Plus: Fundamental depth, foundational breadth • Anatomy and physiology of normal pregnancy • Pathophysiology of complications of pregnancy • Assessment of the pregnant patient • Management of o Normal delivery o Abnormal delivery □ Nuchal cord □ Prolapsed cord □ Breech delivery o Third trimester bleeding □ Placenta previa □ Abruptio placenta o Spontaneous abortion/miscarriage o Ectopic pregnancy o Preeclampsia/Eclampsia	Same as Previous Level	AEMT Material Plus: Fundamental depth, comprehensive breadth • Anatomy and physiology of pregnancy • Pathophysiology of complications of pregnancy • Assessment of the pregnant patient presentations, and management of • Normal delivery • Abnormal delivery o Nuchal cord o Prolapsed cord o Breech • Spontaneous abortion/miscarriage • Ectopic pregnancy • Eclampsia • Antepartum hemorrhage • Pregnancy induced hypertension	Intermediate Material Plus: Complex depth, comprehensive breadth • Anatomy and physiology of pregnancy • Pathophysiology of complications of pregnancy • Assessment of the pregnant patient Psychosocial impact, presentations, prognosis, and management of • Normal delivery • Abnormal delivery o Nuchal cord o Prolapsed cord o Breech • Spontaneous abortion/miscarriage • Ectopic pregnancy • Eclampsia • Antepartum hemorrhage • Pregnancy induced hypertension
13B					Third trimester bleeding o Placenta previa o Abruptio placenta • High risk pregnancy • Complications of labor o Fetal distress o Pre-term o Premature rupture of membranes o Rupture of uterus • Complication of delivery • Post partum complications	Third trimester bleeding o Placenta previa o Abruptio placenta • High risk pregnancy • Complications of labor o Fetal distress o Pre-term o Premature rupture of membranes o Rupture of uterus • Complication of delivery • Post partum complications Foundational depth, foundational breadth • Hyperemesis gravidarum • Post partum depression

13C	Neonatal care	Simple depth, simple breadth • Newborn care • Neonatal resuscitation	EMR Material Plus: Fundamental depth, foundational breadth Assessment and management • Newborn • Neonatal resuscitation	Same as Previous Level	Same as Previous level	Intermediate Material Plus: Complex depth, comprehensive breadth • Anatomy and physiology of neonatal circulation • Assessment of the newborn Presentation and management • Newborn • Neonatal resuscitation
13D	Pediatrics	Simple depth, simple breadth Age-related assessment findings, and age-related assessment and treatment modifications for pediatric specific major diseases and/or emergencies • Upper airway obstruction • Lower airway reactive disease • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome	EMR Material Plus: Fundamental depth, foundational breadth Age-related assessment findings, age-related, and developmental stage related assessment and treatment modifications for pediatric specific major diseases and/or emergencies • Upper airway obstruction • Lower airway reactive disease • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome • Gastrointestinal disease	Same as Previous Level	AEMT Material Plus: Age-related assessment findings, age-related anatomic and physiologic variations, age related and developmental stage related assessment and treatment modifications of the pediatric specific major or common diseases and/or emergencies: Fundamental depth, comprehensive breadth • Foreign body (upper and lower) airway obstruction • Asthma • Bronchiolitis o Respiratory Syncytial Virus (RSV) • Pneumonia • Croup • Epiglottitis • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome (SIDS) • Hyperglycemia • Hypoglycemia	Intermediate Material Plus: Age-related assessment findings, age-related anatomic and physiologic variations, age related and developmental stage related assessment and treatment modifications of the pediatric specific major or common diseases and/or emergencies: Complex depth, comprehensive breadth • Foreign body (upper and lower) airway obstruction • Bacterial tracheitis • Asthma • Bronchiolitis o Respiratory Syncytial Virus (RSV) • Pneumonia • Croup • Epiglottitis • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome (SIDS) • Hyperglycemia • Hypoglycemia Fundamental depth, foundational breadth • Pertussis • Cystic fibrosis • Bronchopulmonary dysplasia • Congenital heart diseases • Hydrocephalus and ventricular shunts

13E	Geriatrics	Simple depth, simple breadth • impact of age-related changes on assessment and care	EMR Material Plus: Fundamental depth, foundational breadth Changes associated with aging, psychosocial aspects of aging and age-related assessment and treatment modifications for the major or common geriatric diseases and/or emergencies • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia	EMT Material Plus: Complex depth, foundational breadth • Fluid resuscitation in the elderly	AEMT Material Plus: Normal and abnormal changes associated with aging, pharmacokinetic changes, polypharmacy, and age-related assessment and treatment modifications for the major or common geriatric diseases and/or emergencies. Fundamental depth, comprehensive breadth • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia • Delirium Fundamental depth, foundational breadth • Herpes zoster • Inflammatory arthritis	Intermediate Material Plus: Normal and abnormal changes associated with aging, pharmacokinetic changes, psychosocial and economic aspects of aging, polypharmacy, and age-related assessment and treatment modifications for the major or common geriatric diseases and/or emergencies Complex depth, comprehensive breadth • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia • Delirium o Acute confusional state Fundamental depth, foundational breadth • Herpes zoster • Inflammatory arthritis
	13F Patients with Special Challenges	Simple depth, simple breadth • Recognizing and reporting abuse and neglect	EMR Material Plus: Simple depth, simple breadth Healthcare implications of • Abuse • Neglect • Homelessness • Poverty • Bariatrics • Technology dependent • Hospice/ terminally ill • Tracheostomy care/dysfunction • Homecare • Sensory deficit/loss • Developmental disability	EMT Material Plus: Fundamental depth, foundational breadth Healthcare implications of • Abuse • Neglect • Homelessness • Poverty • Bariatrics • Technology dependent • Hospice/ terminally ill • Tracheostomy care/dysfunction • Homecare • Sensory deficit/loss • Developmental disability	Same as Previous level	Intermediate Material Plus: Complex depth, comprehensive breadth Healthcare implications of • Abuse • Neglect • Poverty • Bariatrics • Technology dependent • Hospice/ terminally ill • Tracheostomy care/dysfunction
	14 EMS Operations	Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level

14A	Principles of Safely Operating a Ground Ambulance	Simple depth, simple breadth • Risks and responsibilities of emergency response	EMR Material Plus: Simple depth, foundational breadth • Risks and responsibilities of transport	Same as Previous Level	Same as Previous Level	Same as Previous Level
	Incident Management	Simple depth, simple breadth • Establish and work within the incident management system	EMR Material Plus: Fundamental depth, foundational breadth • Establish and work within the incident management system	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth • Establish and work within the incident management system
14C	Multiple Casualty Incidents	Simple depth, simple breadth • Triage principles • Resource management	EMR Material Plus: Simple depth, foundational breadth • Triage • Performing • Re-Triage • Destination Decisions • Post Traumatic and Cumulative Stress	Same as Previous Level	Same as Previous Level	Same as Previous Level
	Air Medical	Simple depth, simple breadth • Safe air medical operations • Criteria for utilizing air medical response	Same as Previous Level	Same as Previous Level	AEMT Material Plus: fundamental depth, foundational breadth • Medical risks/needs/advantages	Intermediate Material Plus: Complex depth, comprehensive breadth • Medical risks/needs/advantages
14E	Vehicle Extrication	Simple depth, simple breadth • Safe vehicle extrication • Use of simple hand tools	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level
14F	Hazardous Materials Awareness	Simple depth, simple breadth • Risks and responsibilities of operating in a cold zone at a hazardous material or other special incident	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level
	Mass Casualty Incidents due to Terrorism and Disaster (this section subject to ongoing collective and cooperative review and input from all stakeholders including the Department of Transportation, Department of Homeland Security and the Department of Health and Human Services)	Simple depth, simple breadth • Risks and responsibilities of operating on the scene of a natural or man made disaster	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level

	Clinical Behavior/Judgment					
C1	Assessment	Perform a simple assessment to identify life threats, identify injuries requiring immobilization and conditions requiring treatment within the scope of practice of the EMR: including foreign substance in the eyes and nerve agent poisoning.	Perform a basic history and physical examination to identify acute complaints and monitor changes. Identify the actual and potential complaints of emergency patients.	Perform a basic history and physical examination to identify acute complaints and monitor changes. Identify the actual and potential complaints of emergency patients.	Perform a comprehensive history and physical examination to identify factors affecting the health of a patient. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. Apply the multiple determinants of health and clinical care.	Perform a comprehensive history and physical examination to identify factors affecting the health and health needs of a patient. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology, and epidemiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. Integrate and synthesize the multiple determinants of health and clinical care. Perform health screening and referrals.
C2	Therapeutic communication and cultural competency	Communicates to obtain and clearly transmit information with an awareness of cultural differences.	Communicate in a culturally sensitive manner.	Communicate in a culturally sensitive manner.	Same as Previous Level	Effectively communicate in a manner that is culturally sensitive and intended to improve the patient outcome.

C3	Psychomotor Skills	Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level. Airway and Breathing • Basic Airway Maneuvers • Head-tilt, chin-lift • Jaw thrust • Modified chin lift • FBAO relief - manual • Oropharyngeal airway • Sellick's maneuver • Positive pressure ventilation devices such as BVM • Suction of the upper airway • Supplemental oxygen therapy • Nasal cannula • Non-rebreather mask Assessment • Manual B/P Pharmacologic interventions (lifesaving medications intended for self or peer rescue in hazardous materials situation, nerve agent antidote kit)	Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level. Airway and Breathing • Nasopharyngeal airway • Positive pressure ventilation • Manually-triggered ventilators • Automatic transport ventilators • Supplemental oxygen therapy • Humidifiers • Partial-rebreather mask • Venturi mask Assessment • Pulse oximetry • Automatic B/P Pharmacologic interventions • Assist patients in taking their own prescribed medications • Administration of OTC medications with medical oversight • Oral glucose for hypoglycemia • Aspirin for chest pain	Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level. Airway and Breathing • Airways not intended for insertion into the trachea • Esophageal-tracheal • Multi-lumen airway • Tracheal-bronchial suctioning of an already intubated patient Assessment • Blood glucose monitor Pharmacologic interventions • Establish and maintain peripheral intravenous access • Establish and maintain intraosseous access in pediatric patient • Administer (nonmedicated) intravenous fluid therapy • Sublingual nitroglycerin (chest pain) • Subcutaneous or intramuscular epinephrine (anaphylaxis) • Glucagon (hypoglycemia)	Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND Virginia Scope of Practice (VaSoP) at this level. Airway and Breathing	Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level. Airway and Breathing • Oral and nasal endotracheal intubation • FBAO – direct laryngoscopy • Percutaneous cricothyrotomy • Pleural decompression • BiPAP, CPAP, PEEP • Chest tube monitoring • ETCO2 monitoring • NG/OG tube Assessment • ECG interpretation • 12-lead interpretation • Blood chemistry analysis Pharmacologic interventions • Intraosseous insertion • Enteral and parenteral administration of approved prescription medications • Access indwelling catheters and implanted central IV ports • Medications by IV infusion
		Medical/Cardiac care • Manual CPR • AED • Assisted normal delivery Trauma care • Manual stabilization • C-spine injuries • Extremity fractures • Bleeding control • Emergency moves • Eye irrigation	Medical/Cardiac care • Mechanical CPR • Assisted complicated delivery Trauma care • Spinal immobilization • Cervical collars • Seated • Longboard • Rapid extrication • Splinting • Extremity • Traction • PASG • Mechanical patient restraint • Tourniquet	• Intravenous 50% dextrose (hypoglycemia) • Inhaled beta agonists (wheezing) • Intravenous narcotic antagonist (narcotic overdose) • Nitrous oxide (pain)		• Maintain infusion of blood or blood products • Blood sampling • Thrombolytic initiation • Administer physician approved medications Medical/Cardiac care • Cardioversion • Manual defibrillation • Transcutaneous pacing • Carotid massage Trauma care • Morgan lens

C5	Professionalism	Demonstrate professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time management, teamwork/ diplomacy, respect, patient advocacy, and careful delivery of service	Demonstrate professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time management, teamwork/ diplomacy, respect, patient advocacy, and careful delivery of service.	Demonstrate professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time management, teamwork/ diplomacy, respect, patient advocacy, and careful delivery of service.	Same as Previous Level	Is a role model of exemplary professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time management, teamwork/ diplomacy, respect, patient advocacy, and careful delivery of service.
	Decision Making	Initiates simple interventions based on assessment findings	Initiates basic interventions based on assessment findings intended to mitigate the emergency and provide limited symptom relief while providing access to definitive care	Initiates basic and selected advanced interventions based on assessment findings intended to mitigate the emergency and provide limited symptom relief while providing access to definitive care	Performs basic and advanced interventions as part of a treatment plan intended to mitigate the emergency, provide symptom relief, and improve the overall health of the patient. Evaluates the effectiveness of interventions and modifies treatment plan accordingly.	Performs basic and advanced interventions as part of a treatment plan intended to mitigate the emergency, provide symptom relief, and improve the overall health of the patient. Evaluates the effectiveness of interventions and modifies treatment plan accordingly.
	Record Keeping	Record simple assessment findings and interventions	Report and document assessment data and interventions.	Report and document assessment findings and interventions.	Report and document assessment findings and interventions. Collect and report data to be used for epidemiological and research purposes.	Report and document assessment findings and interventions. Collect and report data to be used for epidemiological and research purposes.

C8	Patient Complaints	Perform a patient assessment and provide prehospital emergency care for patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, apnea, back pain, behavioral emergency, bleeding, cardiac arrest, chest pain, cyanosis, dyspnea, eye pain, GI bleeding, hypotension, multiple trauma, pain, paralysis, poisoning, shock, and stridor/drooling.	Perform a patient assessment and provide prehospital emergency care and transportation for patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ataxia, back pain, behavioral emergency, bleeding, cardiac arrest, cardiac rhythm disturbances, chest pain, constipation, cyanosis, dehydration, diarrhea, dizziness/vertigo, dysphasia, dyspnea, edema, eye pain, fatigue, fever, GI bleeding, headache, hematuria, hemoptysis, hypertension, hypotension, joint pain/swelling, multiple trauma, nausea/vomiting, pain, paralysis, pediatric crying/fussiness, poisoning, rash, rectal pain, shock, sore throat, stridor/drooling, syncope, urinary retention, visual disturbances, weakness, and wheezing.	Perform a patient assessment and provide prehospital emergency care and transportation for patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ascites, ataxia, back pain, behavioral emergency, bleeding, blood and body fluid exposure, cardiac arrest, cardiac rhythm disturbances, chest pain, congestion, constipation, cough/hiccough, cyanosis, dehydration, dental pain, diarrhea, dizziness/vertigo, dysmenorrhea, dysphasia, dyspnea, dysuria, ear pain, edema, eye pain, fatigue, feeding problems, fever, GI bleeding, headache, hearing disturbance, hematuria, hemoptysis, hypertension, hypotension, incontinence, jaundice, joint pain/swelling, malaise, multiple trauma, nausea/vomiting, pain, paralysis,	Perform a patient assessment, develop a treatment and disposition plan for patients with the following complains: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ascites, ataxia, back pain, behavioral emergency, bleeding, blood and body fluid exposure, cardiac arrest, cardiac rhythm disturbances, chest pain, congestion, constipation, cough/hiccough, cyanosis, dehydration, dental pain, diarrhea, dizziness/vertigo, dysmenorrhea, dysphasia, dyspnea, dysuria, ear pain, edema, eye pain, fatigue, feeding problems, fever, GI bleeding, headache, hearing disturbance, hematuria, hemoptysis, hypertension, hypotension, incontinence, jaundice, joint pain/swelling, malaise, multiple trauma, nausea/vomiting, pain, paralysis,
	Scene Leadership	Manage the scene until care is transferred to an EMS team member licensed at a higher level arrives.	Entry-level EMTs serve as an EMS team member on an emergency call with more experienced personnel in the lead role. EMTs may serve as a team leader following additional training and/or experience.	Serve as an EMS team leader of an emergency call.	Function as the team leader of a routine, single patient advanced life support emergency call.

C10	Scene Safety	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.
	Educational Infrastructure				
E1	Educational Facilities	<ul style="list-style-type: none"> • Facility sponsored or approved by sponsoring agency • ADA compliant facility • Sufficient space for class size • Controlled environment 	Same as Previous Level	Same as Previous Level	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) Standards and Guidelines (www.coaemsp.org)
	Student Space	<ul style="list-style-type: none"> • Provide space sufficient for students to attend classroom sessions, take notes and participate in classroom activities • Provide space for students to participate in kinematic learning and practice activities 	Same as Previous Level	Same as Previous Level	
	Instructional Resources	<ul style="list-style-type: none"> • Provide basic instructional support material • Provide audio, visual, and kinematic aids to support and supplement didactic instruction 	Same as Previous Level	Same as Previous Level	
	Instructor Preparation Resources	<ul style="list-style-type: none"> • Provide space for instructor preparation • Provide support equipment for instructor preparation 	Same as Previous Level	Same as Previous Level	
	Storage Space	<ul style="list-style-type: none"> • Provide adequate and secure storage space for instructional materials 	Same as Previous Level	Same as Previous Level	
	Sponsorship	<ul style="list-style-type: none"> • Sponsoring organizations shall be one of the following: • Accredited educational institution, or • Public safety organization, or • Accredited hospital, clinic, or medical center, or • Other State approved institution or organization 	Same as Previous Level	Same as Previous Level	

Virginia EMS Education Standards (VEMSES)

E7	Programmatic Approval	<ul style="list-style-type: none"> • Sponsoring organization shall have programmatic approval by authority having jurisdiction for program approval (State) 	Same as Previous Level	Same as Previous Level	Same as Previous Level
	E8 Faculty	<p>The course primary instructor should</p> <ul style="list-style-type: none"> • be educated at a level higher than he or she is teaching; however, as a minimum, he or she must be educated at the level he or she is teaching • Have successfully completed an approved instructor training program or equivalent 	Same as Previous Level	Same as Previous Level	Same as Previous Level
E9	Medical Director Oversight	<ul style="list-style-type: none"> • Provide medical oversight for all medical aspects of instruction 	Same as Previous Level	Same as Previous Level	Same as Previous Level
	E10	<ul style="list-style-type: none"> • None required at this level 	<ul style="list-style-type: none"> • Students should observe emergency department operations for a period of time sufficient to gain an appreciation for the continuum of care. • Students must perform 10 patient assessments • A minimum <u>five</u> of these patient assessments must be performed on live patients. These should be performed on an ambulance or in an emergency department or may be completed in a clinic, nursing home, doctor's office, etc. • No more than <u>five</u> of the required 10 patient assessments may be performed on standardized programmed patients or advanced simulation mannequins. 	See State Requirements	See State Requirements

E11	Hospital/Clinical Experience			<p>The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with chest pain.</p> <ul style="list-style-type: none"> • The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with respiratory distress. • The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with altered mental status. • The student must demonstrate the ability to perform an adequate assessment on pediatric, adult and geriatric patients. 	
E12	Field Experience	<ul style="list-style-type: none"> • None required at this level 	<ul style="list-style-type: none"> • The student must participate in and document patient contacts in a field experience approved by the medical director and program director. 	<ul style="list-style-type: none"> • The student must participate in and document team leadership in a field experience approved by the medical director and program director. 	See State Requirements

E13	Course Length	<ul style="list-style-type: none"> • Course length is based on competency, not hours • Course material can be delivered in multiple formats including but not limited to: • Independent student preparation • Synchronous/Asynchronous distributive education • Face-to-face instruction • Pre- or co-requisites • Course length is estimated to take approximately 48-60 didactic and laboratory clock hours 	<ul style="list-style-type: none"> • Course length is based on competency, not hours • Course material can be delivered in multiple formats including but not limited to: • Independent student preparation • Synchronous/Asynchronous distributive education • Face-to-face instruction • Pre- or co-requisites • Course length is estimated to take approximately 150-190 clock hours including the four integrated phases of education (didactic, laboratory, clinical and field) to cover material 	<ul style="list-style-type: none"> • Course length is based on competency, not hours • Course material can be delivered in multiple formats including but not limited to: • Independent student preparation • Synchronous/Asynchronous distributive education • Face-to-face instruction • Pre- or co-requisites • Course length is estimated to take approximately 150-250 clock hours beyond EMT requirements including the four integrated phases of education (didactic, laboratory, clinical and field) to cover material 	See State Requirements
E14	Course Design	<ul style="list-style-type: none"> • Provide the following components of instruction: • Didactic instruction • Skills laboratories 	<ul style="list-style-type: none"> • Provide the following components of instruction: • Didactic instruction • Skills laboratories • Hospital/Clinical experience • Field experience 	Same as Previous Level	Same as Previous Level
E15	Student Assessment	<ul style="list-style-type: none"> • Perform knowledge, skill, and professional behavior evaluation based on educational standards and program objectives • Provide several methods of assessing achievement • Provide assessment that measures, as a minimum, entry level competency in all domains 	Same as Previous Level	Same as Previous Level	Same as Previous Level
E16	Program Evaluation	<ul style="list-style-type: none"> • Provide evaluation of program instructional effectiveness • Provide evaluation of organizational and administrative effectiveness of program 	Same as Previous Level	Same as Previous Level	Same as Previous Level